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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,660	11/18/2003	Herbert G. Ross JR.	11201/11802	5349

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EXAMINER

ROJAS, BERNARD

ART UNIT PAPER NUMBER

2832

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/715,660	ROSS, HERBERT G.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Bernard Rojas	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-14 is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03092004</u> .  | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. [US 5,438,869] in view of Thomas Jr. [US 3,859,651].

Claim 1, Mueller discloses a dial assembly [Figure 1] comprising: a first member [10] having a pivot pin [15] attached thereto; a dial magnet [17] rotatably mounted on said pivot pin; a reed switch assembly [Figure 4] positioned operatively adjacent to said dial magnet comprising: a reed switch [36-44].

Mueller et al. does not teach a bias magnet positioned such as said reed switch is held in the first position when the poles of said dial and bias magnets are in a first orientation and will be held in a second position when the poles of the dial magnet and bias magnet are in a second orientation.

Thomas discloses a bias magnet [140] positioned adjacent to a reed switch that is held in the first position when the poles of the dial and bias magnets are in a first orientation and will be held in a second position when the poles of the dial magnet and bias magnet are in a second orientation [Figure 7].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a biasing magnet to the reed switches of Mueller in order to

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decrease the flux density of the dial magnet required to actuate the reed switch and to easily adjust the magnetic flux density of the reed switch to accommodate for variances in its sensitivity [Col. 11, lines 62 – 67 and Col. 10, lines 59 – 64].

Claim 2, Mueller et al. discloses a dial assembly of claim 1 further comprising a cover (encloses the reed switches) defining a receptacle for receiving said reed switch assembly [Figure 4].

Claim 3, Mueller et al. discloses a dial assembly comprising of claim 1 wherein in said first position of said reed switch the reeds of said reed switch are in contact [Figure 4, magnet 17, switch 38].

Claim 4, Mueller et al. discloses a dial assembly comprising of claim 2 wherein in said first position of said reed switch the reeds of said reed switch are in contact [Figure 4, magnet 17, switch 38].

Claim 5, Mueller et al. discloses a dial assembly [Figure 1] comprising: a first member [10] having a pivot pin [15] attached thereto; a dial magnet [17] rotatably mounted on said pivot pin; a second member (encloses the reed switches) attached to said first member to form a cover; a reed switch assembly [Figure 4] removably positioned operatively adjacent to said dial magnet comprising: a reed switch [36-44].

Mueller does not teach a bias magnet positioned such as said reed switch is held in the first position when the poles of said dial and bias magnets are in a first orientation and will be held in a second position when the poles of the dial magnet and bias magnet are in a second orientation.

Thomas discloses a bias magnet [140] positioned adjacent to a reed switch that is held in the first position when the poles of the dial and bias magnets are in a first orientation and will be held in a second position when the poles of the dial magnet and bias magnet are in a second orientation [Figure 7].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a biasing magnet to the reed switches of Mueller in order to decrease the flux density of the dial magnet required to actuate the reed switch and to easily adjust the magnetic flux density of the reed switch to accommodate for variances in its sensitivity [Col. 11, lines 62 – 67 and Col. 10, lines 59 – 64].

Claim 6, Mueller et al. discloses a dial assembly of claim 5 further wherein said first member defines a receptacle (encloses the reed switches) for receiving said reed switch assembly [Figure 4].

Claim 7, Mueller et al. discloses a dial assembly of claim 6 further wherein said second member defines a receptacle for receiving (encloses the reed switches) said reed switch assembly [Figure 4].

Claim 8, Mueller et al. discloses a dial assembly comprising of claim 5 wherein in said first position of said reed switch the reeds of said reed switch are in contact [Figure 4, magnet 17, switch 38].

Claim 9, Mueller et al. discloses a dial assembly comprising of claim 6 wherein in said first position of said reed switch the reeds of said reed switch are in contact [Figure 4, magnet 17, switch 38].

Claim 10, Mueller et al. discloses a dial assembly comprising of claim 7 wherein in said first position of said reed switch the reeds of said reed switch are in contact [Figure 4, magnet 17, switch 38].

***Allowable Subject Matter***

Claims 11-14 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach nor suggest, in the claimed combination, a gauge comprising: (a) a gauge assembly having (i) a gauge head; (ii) a support member extending from said gauge head; (iii) a transmitting shaft having a first end and a second end rotatable in said support member; (iv) a tank magnet attached to said first end of said transmitting shaft; (v) a float arm linked to said transmitting shaft such that movement of said float arm results in rotation of said transmitting shaft; (b) a dial assembly mounted on said gauge assembly having: (i) a first member having a pivot pin attached thereto; (ii) a dial magnet rotatably mounted on said pivot pin; (iii) a reed switch assembly positioned operatively adjacent to said dial magnet comprising: (iv) a reed switch; and (v) a bias magnet positioned such as said reed switch is held in the first position when the poles of said dial and bias magnets are in a first orientation and will be held in a second position when the poles of the dial magnet and bias magnet are in a second orientation.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M-F 8-4:00), every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Bernard Rojas*  
Br

*[Signature]*  
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